

**Electric Feedback Forum
Office of Governor Martin O'Malley
Improving Maryland's Electric Distribution System**

Roundtable Discussion #7: Human Infrastructure

Sept. 10, 2012, 1:30pm – 4:30pm
President's Conference Room East 1 and 2
Miller Senate Office Building
11 Bladen Street
Annapolis MD, 21401

Executive Order 01.01.2012.15

List of Invited Participants

Brian Daschbach, Vice-President, Integrated Field Services, BGE

Scott H. Strauss, Esq., Spiegel & McDiarmid, LLP

Jim Hunter, Director, Utility Department, International Brotherhood of Electrical
Workers

Robert Whalen, President, System Local 102, Utility Workers Union of America

Governor's Executive Order Roundtable: Human Infrastructure

Brian Daschbach, Vice President - Integrated Field Services



September 10, 2012

Past and Current Staffing Levels

- BGE's staffing policies are future-looking and proactive
- BGE recognized and has been addressing the attrition effects of an aging workforce for several years, aggressively working to replenish, enable and expand our field capability
 - The number of BGE field employees has grown by more than 10% since 1999
 - The total number of OH Primary field resources (BGE plus Alliance Contractor) has grown by more than 40%

<u>Summary - BGE Field Personnel:</u>	<u>As of December 31</u>												
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
OH Primary	400	407	385	312	307	320	331	364	367	356	383	395	373
Total Alliance OH Primary Contractors*	0	0	0	0	131	0	113	133	149	115	107	182	194
<i>OH Primary Resources Subtotal</i>	<i>400</i>	<i>407</i>	<i>385</i>	<i>312</i>	<i>438</i>	<i>320</i>	<i>444</i>	<i>497</i>	<i>516</i>	<i>471</i>	<i>490</i>	<i>577</i>	<i>567</i>
Underground/URD	137	150	167	158	162	173	168	178	168	195	184	192	194
Substation	184	170	172	135	128	133	139	141	135	145	144	151	148
Secondary/Metering	287	310	323	295	313	311	320	304	307	284	282	287	297
Training Program	13	4	3	28	38	54	71	64	52	44	61	86	120
Total BGE Field Employees	1021	1041	1050	928	948	991	1029	1051	1029	1024	1054	1111	1132
Grand Total Field Resources	1021	1041	1050	928	1079	991	1142	1184	1178	1139	1161	1293	1326

*BGE uses Alliance Contractors on a daily basis to perform various construction and inspection activities on the electric system. These contractors help supplement BGE resources for restoration activities during a storm.



Mutual Assistance

Why?

- Mutual Assistance allows companies to quickly and dramatically supplement their resources during times of need while avoiding underutilization of resources during periods of normal operations.
- Since 2006, BGE has restored power to customers during 94% of all weather events¹ using internal staffing and Alliance Contractors

When?

- In advance of significant imminent events (hurricanes, blizzards, ice storms, etc.) once the threat is identified by one of BGE's weather services
- In reaction to rare violent and unpredictable events (Derecho, tornados, etc.)
- In response to an event which has impacted or will impact the BGE system and where restoration is expected to take more than 24-36 hours²

From Where?

- Regional Mutual Assistance Groups such as Maryland Utilities Group for Mutual Assistance (MUGMA) and Mid-Atlantic Mutual Assistance Group (MAMA)
- Other utility organizations such as the Southeastern Electric Exchange (SEE) and the Edison Electric Institute (EEI), local qualified contractors and BGE's sister utilities

¹ A weather event is an event that results in a storm declaration in BGE's OMS. There are many weather days that cause minimal damage to the BGE electric system.

² From when the storm event clears the service territory.

Future Staffing Levels

- BGE has incorporated the impacts of weather events into our business, infrastructure and resource planning
- Over the next five years, BGE plans to invest approximately \$3 billion to maintain and improve the reliability and the resiliency of its electric delivery system in a variety of ways including
 - Hardening our system to better withstand weather events
 - Utilizing selective undergrounding of overhead circuits
- BGE is also expanding our Vegetation Management activities
 - Spending has increased from \$23 million in 2007 to \$35 million in 2012 to address reliability issues including RM 43 standards compliance
- BGE's capital plan will require an increase in overhead field resources to maintain the system and to build enhancements. These same construction resources are available and used to support restoration efforts.



Future Staffing Levels

- BGE has established a comprehensive Utility Training Program to address the aging workforce and ensure the continued safety and effectiveness of field personnel
 - Currently, one in ten BGE field personnel are either Trainees or in positions recently promoted from Trainee status
 - Experienced field personnel receive ongoing training throughout their careers
- Trainees follow a progression through a series of job titles and must meet certain requirements within each title before progressing. The Overhead job progression serves as an example:

Job Title	Years of Training within Job Title	Cumulative Years of Training
Utility Trainee	1	1
Overhead Trainee	0.5 - 1	1.5 - 2
Overhead Mechanic B	1.5 - 2	3 - 4
Overhead Mechanic	1.5 - 2	4.5 - 6
Service Operator	1.5 - 2	6 - 8
Crew Leader		7+

Investing in the workforce of the future

- In 2011, BGE invested more than \$12 million to complete construction of a state of the art utility training center dedicated to new employee craft training and ongoing skills development and qualification.



Staffing Level Impacts on Reliability and Resiliency – a balanced view

- Additional resources can improve both reliability and resiliency
 - Example: Additional Vegetation Management Resources
 - Allows for more extensive tree trimming to be performed reducing the number of tree-related outages and improving reliability
 - Reduction in tree-related outages also benefits resiliency and reduces safety concerns
 - Tree-related outages often cause the most system damage, taking longer to repair before service can be restored and increasing the system average restoration time
 - Tree-related outages create public and employee safety concerns due to blocked roads, damaged equipment, downed wires, etc.
 - **Need to consider** that individual property owners and communities often resist extensive trimming practices
 - Example: Additional Overhead Primary Resources
 - Allows for more outage events to be worked at one time so that less outage events wait for a crew to be assigned
 - Can be strategically deployed throughout the system to reduce travel time to outage events
 - **Need to consider** BGE's ongoing commitment to manage resource levels in the most cost-effective way, avoiding staff underutilization and delivering best overall value to our customers

Statement of Jim Hunter to Maryland Task Force

9-10- 2012

My name is Jim Hunter. I am the Director of the Utility Department for the International Brotherhood of Electrical Workers (IBEW). The IBEW has over 720,000 members throughout the U.S. and Canada. 220,000 of these members are in the utility industry.

I am a lifelong Maryland resident and a retired employee of PEPCO. I worked for PEPCO for over 20 years, became the President and Business Manager of IBEW Local 1900 for 7 years and have been at the International for the last 11 years.

My father retired from PEPCO after 30 years and my son now works for the company. I have seen PEPCO go through many changes and, being that the IBEW sees this company from the inside, I am very saddened to see it in its current condition. The following is an excerpt from my testimony to the MD PSC in 1997 on deregulation:

Electricity, unlike goods, cannot be stored or inventoried; it must be used when produced. Mechanisms must be developed to provide financial incentives to ensure that capacity will always meet demand. Electricity is an essential service, not merely a commodity. Customers will not tolerate less reliable service.

Reliability of electric service is also a public safety issue and a matter of national security. Society relies on the smooth operation of electrically based technologies.

The other area of reliability is the Distribution system. It is clear for us to see how both PEPCO and BGE have responded to the threat of competition; it was by cutting their workforces. This you can see by reviewing the enclosed (Attachment "C"). This is a copy of a Data Request by the D.C. Office of People's Council in the D.C. merger case. This chart clearly shows that the two companies have made major cuts in Field personnel. These cuts have affected service quality and reliability. You cannot cut 17.7% of your field workforce and not affect service. We have seen the maintenance schedules extended in both the

Substation Group and the Generating Group. Maintenance that was performed yearly has been pushed back to every other year or longer intervals. Maintenance checks that were done on Major Generating Units every year has been extended to every three (3) or four (4) years. The effects of deferring maintenance will not be seen immediately, it will take years for it to show up in service interruptions, but it will eventually happen.

The reduced maintenance and the smaller field workforces are signs of how the Utilities will be forced to respond to the new competitive pressures.

PEPCO was continually chastised in the 1960' and 1970's for gold plating the system. They were accused of going overboard with reliability, installing substations that had more capacity then they needed at the time as well as installing more generation than they needed to serve their customers. We then saw deregulation in Maryland and the Company divested its generation. We also saw the Public Utility Holding Company Act (PUHCA) repealed in 2005 which allowed PHI to form as a holding company.

The Public Service Commissions have not changed with the reforms in the industry. **PEPCO is simply an income source for PHI.** The PSC must come up with a system that rewards good performance and penalizes poor performance. The utilities are a business and they only understand profits and losses.

In 1991, PEPCO had 703.4 customers per field employee and by 1995 that number had risen to 854.5 customers per field employee. I would like to know what that number is today. Current management has decided to contract out as much work as possible and not hire and train its own workforce. This is a mistake that we are all paying for every storm. The fact that we must rely on mutual assistance from Canada and Oklahoma is ridiculous. Staffing during a storm is critical to restoration. We have seen a decline in staffing across the country and as companies have cut back their workforces they are more and more reluctant to send crews out of state to help others.

I understand the PSC is holding hearings on reliability and I applaud that move. The reliability indexes for both storm and non-storm events should be analyzed and made public.

Reliability costs money and many surveys within the industry show that customers are willing to pay a little more for better service, as long as they know where the money is going.

In my 1997 testimony I talked about an 18 hour outage at my home on Colesville Road, inside the beltway. This last storm, the August 2012 duration, my outage lasted over 72 hours..

I have heard TV commercials trying to justify the long outages by saying they had to replace over 250 poles in 7 days. Alabama Power had some tornadoes last year that devastated the state. They replaced 7600 poles in 7 days by comparison. Understand that Alabama is still regulated and vertically intergraded. Alabama practices storm restoration and is hiring linemen, in fact, this year alone they have hired over 125 linemen. PEPCO is not alone in its actions and we are seeing more companies face the same problems of reliability. The industry has an ageing workforce and they are not replacing people at the levels needed for the next generation of workers. Mutual assistance is not the answer, adequate staffing is what must happen to fix the problem.

I do believe PEPCO has changed under Joe Rigby but he has inherited a system that has had years of neglect. To hire and train employees, as well as replacing the aging infrastructure, costs money and to ask for a rate increase while performance is poor will be quite difficult. The PSC must understand that the company will need money to fix the problem but that these funds must go into the system. The IBEW fought the repeal of PUHCA because we were concerned that the holding companies would just pull profits out of the regulated companies. I think the PSC needs to look at how much of the rates are going into the system and how much is being stripped off by the holding company. The question is whether PEPCO has the adequate resources to provide the services that we all want and need.

I would like to close by saying that the current PEPCO workforce is taking a lot of heat for problems that they had nothing to do with. The average lineman is working an unbelievable amount of overtime and is dedicated to restoring service during a storm, but when they don't have the manpower or the equipment to do the job, they become just as frustrated as the customer.

My recommendations to improve the reliability and resiliency of the distribution system over the next 2 years are as follows:

1. Examine the historic numbers pertaining to the amount of crews available to respond to outages as well as the amount of customers per field employees (See attachment). The Companies staffing levels are at historic low levels and need to be increased substantially.
2. Support the PSC hearings on reliability. Require the Companies to produce reliability indexes for **both** storm and non-storm events for the past 10 years.
3. Perform an in-depth analysis of the costs for mutual assistance compared to having staff on location. We will always need mutual assistance for major events but that should be the exception not the norm.

My Long term solutions are as follows:

1. I suggest the companies provide a comprehensive analysis of the distribution system. The analysis should include recommendations on what actions should be taken by the company and have them listed by priority and cost.
2. The companies also need to do a workforce assessment and submit a plan to the PSC on how they will attract, hire and train the necessary employees.

BEFORE THE

PUBLIC SERVICE COMMISSION OF MARYLAND

In the Matter of the Commission's
Inquiry into the Provision and Regulation
of Electric Service.

Case No. 8738

COMMENTS

James L. Hunter, on behalf of IBEW Local 1900, tenders these Reply Comments in the above-styled investigation instituted by the Maryland Public Service Commission by Order No. 72938, dated October 9, 1996. These Comments on the Staff Report dated May 30, 1997, are pursuant to Order No. 73496 issued June 2, 1997.

I.B.E.W. Local 1900 believes that the Maryland Public Service Commission should move slowly and not make any hasty decisions on "Retail Wheeling".

We have reviewed the Staff Report and we believe that the Staff did an outstanding job in identifying most of the problems that would be associated with Customer Choice, or as it is better known, Retail Wheeling. We do however feel that there are many unanswered questions and some issues that were not dealt with in the report.

We are submitting, with our filing, a short video, (Attachment "A"), which represents the IBEW's position on "Retail Wheeling". Also being submitted is a booklet, (Attachment "B") regarding the impact of deregulation.

We believe that one of the issues that the staff did not adequately look at is the Transmission power grid, within Maryland. We understand the Maryland power grid. We know that the grid cannot handle large power flows from company to company outside of what is currently being transported. This would mean, in itself, that real Retail Wheeling is not possible in Maryland unless there are major changes in the Transmission systems.

The IBEW has been involved in the Deregulation movement, all across the Country. They have set up a taskforce to look at the issues involved with Deregulation and the Taskforce has come up with nine (9) major issues that they believe must be included in any Retail Wheeling programs. Local 1900 has taken those idea's and compared them to the Staff recommendations and this is our conclusions.

We strongly believe that there are nine (9) major issues that must be dealt with, if "Retail Wheeling" is going to work in Maryland.

These issues are:

1). **RELIABILITY:** When electric power companies are subject to prudent local and federal control and regulatory oversight, they are responsible for operating and maintaining a reliable, efficient electricity system. The incentive to invest in reliability protections becomes less likely when profits are the primary consideration. In fact, the incentive to cut costs may result in systems so over stretched they may not be able to operate efficiently in times of peak demand or during storms.

Electricity, unlike goods, cannot be stored or inventoried; it must be used when produced. Mechanisms must be developed to provide financial incentives to ensure that capacity will always meet demand. Electricity is an essential service, not merely a commodity. Customers will not tolerate less reliable service.

Reliability of electric service is also a public safety issue and a matter of national security. Society relies on the smooth operation of electrically based technologies.

Staff deals with reliability, mainly in the two areas, Generating reliability and Distribution reliability. Staff addresses Generating reliability, but does not give us any concrete solutions to the problem. The concept of an ISO has many problems, as we can see by the fact that even PJM cannot agree on a system ISO.

How will an ISO enforce it's mandates on power marketers that don't even own any Generating Plants ?

The other area of reliability is the Distribution system. It is clear for us to see how both PEPCo and BGE have responded to the threat of competition, it was by cutting their workforces. This you can see by reviewing the enclosed (Attachment "C"). This is a copy of a Data Request by the D.C. Office of People's Council in the D.C. merger case. This chart clearly shows that the two companies have made major cuts in Field personnel. These cuts have affected service quality and reliability. You cannot cut 17.7% of your field workforce and not effect service. We have seen the maintenance schedules extended in both the Substation Group and the Generating Group. Maintenance that was performed yearly has been pushed back to every other year or longer intervals. Maintenance checks that were done on Major Generating Units every year has been extended to every three (3) or four (4) years . The effects of deferring maintenance will not be seen immediately, it will take years for it to show up in service interruptions, but it will eventually happen. The reduced maintenance and the smaller field workforces are signs of how the Utilities will be forced to respond to the new competitive pressures.

We have all heard of the many outages that have occurred in the last few weeks. We firmly believe that the Utility Companies in the state of Maryland as severely understaffed. This under staffing becomes clear in a major storm. I personally live on Route 29, inside of the Washington beltway, I have lived in the neighborhood, off and on for over 35 years. I can remember going for years without an outage and when one did occur it was normally only for an hour or two. The storm two weeks ago left us without power for over 18 hours. We are within 1 mile of the Substation and right on the main highway. The traffic signals were out on Colesville road along with the signals that control the reversible lanes, between Sligo Creek Parkway and Silver Spring.

It appears to us that the Standards of performance that the Staff recommends that we continue to use need some major overhauls if they are to have any effect in the real world of Deregulation.

2). **COST TO CONSUMERS:** No one can predict the certainty what will happen to the price of electricity in an open market. Supporters of radical deregulation speculate prices will fall, yet they do not take into account some factors particular to electric power:

- * With fewer operating reserves, temporary shortages may become more frequent. This will make prices vulnerable to fluctuating demands.
- * It takes several years to plan, design and build new generation capacity. As a result, companies will lose the ability to adjust prices quickly in response to a shortage.

Most educated observers claim that customer choice will be of little or no value to residential consumers or small business in terms of the price of electricity. Large industrial consumers will command any or all lower-cost electricity, leaving higher-cost supplies to residential and small business users.

Staff's recommendation in this area is admirable, but we believe that it will be unenforceable. We agree that all customer classes should benefit from Retail Wheeling, but how that goal is achieved is far from clear.

3). **SOCIETAL IMPACTS:** Local utilities currently support a number of beneficial community programs. In an environment motivated solely by profits, many of these programs will disappear as costs are cut.

—

Lifeline energy assistance programs, community activities, and numerous conservation and economic development activities are funded through electric rates, mainly because of strong identification between the local electric power company and its community. The ability and desire on the part of companies to voluntarily cooperate to achieve state-level social objectives will be impaired under an environment motivated solely by profit.

Staff's recommendations in this area are complete and seem to address most of our concerns.

4). **UNIVERSAL ACCESS:** Under deregulation, electric power companies may not be obligated or have an incentive to serve those customers who are considered a financial risk. Electricity is a necessity, and methods will have to be found to assure that these customers still have electric power companies to serve them at reasonable prices.

Staff's recommendations in this area leaves a lot of burden on the regulated Utility. We agree that the Utility should be compensated for this burden.

5). **TAX REVENUES:** The electric power industry currently pays billions in state and local taxes. What will be the impact of deregulation on these vital revenues, particularly in states and localities where power plants may be shut down when power is brought in from distant areas? Residential consumers and small business might be expected to pay more in taxes to make up the shortfall.

Staff's idea of taxing the outside companies is excellent and novel. We believe that this is a major issue and that Staff has come up with a solution that could work.

6). **STRANDED COSTS:** The electric power industry is the most capital-intensive industry in North America. Hundreds of billions of dollars have been invested in plants and facilities. In response to prudent government regulations, private utilities built large generating plants to provide universal service and meet projected demand for electric power. Companies expected to recover the costs of these long-term investments through rates paid by a defined customer base. In a deregulated industry, these electric power companies will be unfairly burdened with those investment costs, compared to other providers who were not required to make similar investments. Who will compensate the companies for these stranded costs?

We agree with Staff's recommendations in this area.

7). **MEGA-MERGERS AND MARKET DOMINANCE:** Numerous mergers have occurred since restructuring and deregulation initiatives first surfaced in the industry. Many more mergers can be expected. In a recent industry survey, 93% of surveyed power companies anticipated greater consolidation. A key

consumer concern is the potential for abuse of market power by energy behemoths to manipulate prices. With almost 90% of generating capacity provided by the largest 200 systems, can competition grow with deregulation, or will there be merger mania to gain an even higher percentage of the electric generation market?

Electric power companies play a unique role in state and local communities. They are often engines of economic development, and they have traditionally maintained local offices to ensure customer contact and quality service. Much of this regional involvement may be lost when the local company merges with another which has no historical concern for the community. Governmental policymakers have made little effort to effectively analyze and protect communities against the potential adverse effects of mergers.

Staff has failed to address this issue in their recommendations. FERC referred this issue back to the PSC in its ruling on the PEPCo and BGE merger. We believe that this is an important issue that needs to be dealt with in these proceedings.

8). ENVIRONMENT: Through their control over local utility rates, states have been able to meet numerous environmental goals through stringent pollution controls, mandatory use of renewable sources of energy, energy-saving programs, etc. The present balance of environmental concerns associated with electrical energy is threatened, and environmentally beneficial programs may ultimately be dropped.

Effective energy-saving programs provide customers with direct financial incentives to invest in measures and equipment to promote energy efficiency. Successful programs have encouraged installation of reduced-flow shower heads, additional insulation, heater wraps and load-control devices. These energy-saving programs have been shown to be highly cost-effective, allowing the sponsoring company to save fuel, cut transmission and distribution costs, and generate capacity reserves. As a trade-off, the company sacrifices increased sales and related earnings. In an environment motivated solely by profits, the electric power supplier will have no reason to conduct these energy-saving programs.

We believe that the PSC needs to look carefully at this issues. There is already a great deal of Power flowing into Maryland from states such as Ohio and West Virginia. These States do not have the same level of controls on air pollution as Maryland. The influx of Generation will increase if Retail Wheeling is allowed. Maryland needs to protect its environment. We should prohibit Generating assets that do not meet our environmental standards from entering the state.

9). SAFETY AND EMPLOYMENT: Electricity must be transmitted in relatively close proximity to the general public and can be extremely dangerous unless properly produced, delivered and used. In general, workers, management and regulators in the existing industry have achieved an exemplary safety record. This is due to a long history of proper training and appropriate investments in public safety and worker safety.

Staffing levels and training programs have been the first areas cut where deregulation has occurred in other industries. Quality of work life has declined, and employees have found themselves in a race to the bottom on wages and benefits.

We believe that this is an area that the staff did not address, because it was unaware that there could be a problem in the future. We have all grown to accept the idea that safe and reliable power is a fact of life. That mindset must change as we enter into a deregulated marketplace. We have already seen how Utilities will deal with competition. Since 1992, PEPCo has reduced its total workforce by 11.7% and BGE has reduced its workforce by 14.6%. Training has suffered because of the cuts as well as safety. We need standards for the Utilities as we move forward, that is if you consider Retail Wheeling moving forward.

CONCLUSION

These issues must be dealt with, up front, before "Retail Wheeling" is attempted, not as an afterthought.

California is a prime example of a state that has pushed for "Retail Wheeling" and its' consumers of electrical power has felt the effects. The major outages that California has experienced will happen here, on the East Coast, if "Retail Wheeling" is implemented without adequate protections.

We believe that a slow measured approach to Retail Wheeling is the prudent position for the Maryland Public Service Commission to take at this time. We believe in the philosophy that if its not broken, don't try to fix it and we believe that Maryland's Electric Utilities are not broken.

Sincerely

James L. Hunter, Business Manager
President/Financial Secretary
Local 1900, IBEW

BALTIMORE GAS AND ELECTRIC COMPANY
AND
POTOMAC ELECTRIC POWER COMPANY

Maryland Case No. 8725
IBEW Data Request No. 5

Q. 3. PLEASE PROVIDE A LISTING OF ANY REDUCTION IN WORKFORCE, FIRST BY YEAR, THEN BY TOTAL, THEN BY REASON OF SEPARATION, I.E., RETIREMENT, FIRING, ETC. FROM 1992 TO DATE.

A. For BGE: Utility employment for the 1992-95 period is shown below, as is reductions in force due to special early retirement and other associated programs. BGE offered two special early retirement programs for those employees who voluntarily retired during the February 1, 1992 through April 1, 1992 period and for employees who voluntarily retired on February 1, 1994. Other losses not specified were from normal attrition and change in employment.

Year	December Employment	Special Early Retirement	Other Asssociated Programs
1992	8,477	317	0
1993	8,376	0	3
1994	7,305	826	267
1995	7,243	0	25

For Pepco: Pepco utility employment for the 1992-95 period and workforce reductions due to the 1994 Voluntary Severance Program (VSP), which was the Company's only workforce reduction program during this period, are shown below. During this period, Pepco has also instituted hiring freezes which have resulted in additional reductions to the workforce.

<u>Year</u>	<u>December Employment</u>	<u>VSP</u>
1992	5,035	--
1993	4,853	--
1994	4,824	33
1995	4,447	306

POTOMAC ELECTRIC POWER COMPANY
AND
BALTIMORE GAS & ELECTRIC

D.C. FORMAL CASE NO. 951

PEOPLE'S COUNSEL DATA REQUEST NO. 5

5-24. Q. WITH REFERENCE TO PAGE 6 OF BGE/PEPCO (2G), PLEASE PROVIDE COMPARISON OVER THE PAST FIVE YEARS BETWEEN PEPCO'S AND BGE'S FIELD FORCES, PERSONNEL AND MAINTENANCE/REPAIR/ INSTALLATION ACTIVITIES PER NUMBER OF CUSTOMERS, NUMBER OF SERVICE CONNECTIONS, AND MILES OF DISTRIBUTION LINE.

A. The requested statistics for Pepco are shown in the following table:

	Customers Per Field Employee	Circuit Miles Per Field Employee	Service Connections Per Field Employee
1991	703.4	23.9	11.5
1992	814.1	27.5	12.0
1993	770.2	26.3	13.7
1994	810.8	27.6	13.4
1995	854.5	29.2	13.5

Note: These averages are based on total non-exempt employees and do not reflect the number of employees included in any one type of activity.

Sponsor: Robert C. Grantley, Group Vice President - Customers and Community Relations

State Roundtable Participants

Office of Governor O'Malley

Abigail Hopper

Energy Advisor, Office of Governor Martin O'Malley
Email: ahopper@gov.state.md.us

Matthew Raifman

StateStat Analyst, Office of Governor Martin O'Malley
Email: matthew.raifman@maryland.gov

Maryland Public Service Commission

Merwin Sands

Executive Director, Maryland Public Service Commission
Email: merwin.sands@maryland.gov

Jerry T. Hughes

Chief Engineer, Maryland Public Service Commission
Email: thughes@psc.state.md.us

Maryland Energy Administration

Malcolm Woolf

Director, Maryland Energy Administration
Email: mwoolf@energy.state.md.us

Kevin Lucas

Director Energy Market Strategies, Maryland Energy Administration
Email: klucas@energy.state.md.us

David St. Jean

Planning Manager, Energy Assurance, Maryland Energy Administration
Email: dstjean@energy.state.md.us

David Beugelmans

Clean Energy Program Manager, Maryland Energy Administration
Email: dbeugelmans@energy.state.md.us

Maryland Department of Natural Resources

John Griffin

Secretary of Natural Resources, Maryland Department of Natural Resources

Email: jgriffin@dnr.state.md.us

Pete Dunbar

Director, Maryland Department of Natural Resources, Power Plant Research Program

Email: pdunbar@dnr.state.md.us

Sandi Patty

Maryland Department of Natural Resources, Power Plant Research Program

Email: spatty@dnr.state.md.us

Maryland Emergency Management Agency

Ken Mallette

Executive Director, Maryland Emergency Management Agency

Email: ken.mallette@maryland.gov

Michael Fischer

Director of Operations, Maryland Emergency Management Agency

Email: michael.fischer@maryland.gov

Maryland Department of Information Technology

Barney Krucoff

State Geographic Information Officer, Maryland Department of Information Technology

Email: bkrucoff@maryland.gov

Ken Miller

Deputy State Geographic Information Officer, Maryland Department of Information Technology

Email: ken.miller@maryland.gov